Section 3

Application Summary

The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will effect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM): Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on SSM emissions.

The San Juan Generating Station (SJGS) is a four-unit coal fired electric steam generating facility. Each unit consists of a pulverized coal, wall fired, dry bottom boiler. Foster Wheeler manufactured the unit 1 and 2 boilers and Babcock and Wilcox manufactured the units 3 and 4 boilers. Unit 2 was constructed first, followed by units 1, 3 and 4. The units are numbered from south to north. Unit 1 is the furthest south.

The current coal source for SJGS is the nearby BHP Billiton San Juan Coal Company's San Juan Mine, although the facility has utilized other coal sources in the past and is currently evaluating alternative coal sources for the future. The maximum SJGS annual coal usage (all four units combined) is 8,200,000 tons.

The San Juan Mine delivers coal to SJGS by conveyor. From the main delivery point, SJGS conveyors distribute the coal to the individual units, where it is pulverized and sent to the boilers for combustion. Heat from the combustion process is used to produce superheated steam, which in turn drives steam turbines on each unit. Units 1, 3 and 4 have General Electric turbines and unit 2 has a Westinghouse turbine.

After the turbines have extracted energy from the steam, the steam is condensed back to liquid phase, using forced draft cooling towers for heat rejection, and recycled back to the boilers.

Raw water used at SJGS is obtained from the San Juan River, approximately 3.5 miles southeast of SJGS. Raw water from the river is pumped to a raw water reservoir near the plant. SJGS includes a complex processing system for boiler water, cooling water and other water treatment to produce water with the required quality and properties. This water treatment system includes systems for treating and recycling water and for disposal of wastewater streams.

SJGS currently operates under Operating Permit P-062R2 and NSR Permit 0063-M7. Operating Permit P062R2 was issued on January 24, 2011 and NSR permit 0063-M7 was issued on December 14, 2011. The purpose of this Title V permit modification is to add permit limits that have been incorporated into SJGS NSR permit revisions. Two NSR permit revisions were issued in 2011. Permit 0063M6R2 was issued 05/16/11. This permit revision was limited to adding a new voluntary boiler stack SO2 emission limit of 0.15 lbs/mmBtu (30 day rolling average) for each boiler unit. This limit is consistent with the SO2 limit in the proposed New Mexico Regional Haze SIP and is now required in the Federal Regional

Haze FIP. SJGS is meeting the limit approximately 5 years in advance of when it is required by the FIP. This limit was in addition to all other existing limits. Permit 0063M7 was issued 12/14/11. This permit revision was limited to adding emission limits for Total (filterable plus condensable) PM2.5 boiler stack emission limits as required by note 4 of Table 402H of the NSR permit. Prior to this revision, PM2.5 emissions limits were based on filterable only PM. The Total PM2.5 emission limits were in addition to all other existing PM emission limits. This Title V Operating Permit modification application contains the information needed to incorporate the revised NSR SO2 and PM2.5 emission limits. No other changes or modifications are being requested in this modification application. This application includes the following application Sections:

Section 1: Basic dates, contact information, permit numbers etc have been updated
Section 2: Sections 2 C and D have been filled out only for SO_2 and Total PM2.5. All Section 2 information remains unchanged.
Section 3: A description of this permit modification has been added to the basic facility description.
Section 6: This Section includes emission calculations for SO2 and Total PM2.5 only.
Section 19: Applicable Title V specific information has been included.
Section 23: A signed certification page has been completed.

Section 4

Process Flow Sheet

A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

Not required for this modification.

Section 5

Plot Plan Drawn To Scale

A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

Not required for this modification.

Section 6

All Calculations

Show all calculations used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

Tank Flashing Calculations: The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

SSM Calculations: It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

Glycol Dehydrator Calculations: The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

Road Calculations: Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

Significant Figures:

A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

B. At least 5 significant figures shall be retained in all intermediate calculations.

C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

(1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;

(2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**

(3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.

(4) The final result of the calculation shall be expressed in the units of the standard.

COAL BOILER EMISSIONS

The following emission calculations include the addition of the 0.15 lb/mmBtu 30-day rolling average SO2 emission limit per revision to NSR Permit 0063-M6R2 issued 5/16/2011 and addition of a Total (condensable plus filterable) PM2.5 emission limit per revision to NSR permit 0063-M7 issued 12/14/2011.

Emission Points 301 -304 Coal Boiler/Boiler Stacks Units 1 - 4

SO_2

The following calculations cover all SO2 emission limits that apply to the coal boiler units at SJGS. These calculations are included for completeness and context because all previous existing SO2 emission limits remain in effect. Only the 0.15 lb/mmBtu 30-day rolling average limit, as incorporated into NSR permit revision 0063-M6R2, is new for this Title V permit modification.

Uncontrolled SO_2 emissions are estimated by assuming all sulfur in the coal is converted to SO_2. No adjustments have been made for the sulfur that is retained in the ash.

Maximum short-term uncontrolled SO_2 emissions are based on low Btu coal (9,148 Btu/lb) and maximum sulfur content (0.89%). Annual uncontrolled emissions are based on average coal Btu and sulfur content (9,990 Btu/lb and 0.89% S). This should be a conservative value for annual coal as the annual average sulfur content should be less than 0.89%.
Coal use in tph is as follows:

Coal use (tph)		
Unit	Annual Average	Hourly Max
1	185.5	202.6
2	184.6	201.6
3	288.2	314.7
4	282.7	308.7

Calculating SO_2 emissions by SO_2 (lbs/hr) = coal use (tons/hr) * 2000 lbs/ton * 0.0089 lbs S/lb coal * 2 lbs SO_2/lb S results in the following potential to emit (PTE).

Uncontrolled SO_2 Emissions			
Unit	SO_2 (lbs/hr) max	SO_2 (lbs/hr) avg	SO_2 (tpy)
1	7,211.3	6,603.8	28,925
2	7,176.4	6,571.8	28,784

3	11,203.8	10,259.9	44,938
4	10,990.0	10,064.1	44,081

The following limits apply:

Plant-wide: 0.46 lbs/mmBtu annual (NSR/Operating Permit)
Plant-wide: 13,000 lbs/hr 3-hr average (20.2.31NMAC, NSR/Operating Permit)
Plant-wide: 0.55 lbs/mmBtu 30-day average (20.2.31NMAC)
Unit 2: 72% control efficiency based on a 30-day avg (NSR/Operating Permit, 20.2.34NMAC)
Units 1,3,4: 1.2 lbs/mmBtu 3-hr avg (NSR/Operating Permit/40CFR60.4e4(a))
Units 1,2,3,4: 90% control efficiency annual average (CD 9cii)
Units 1,2,3,4: 0.25 lbs/mmBtu 7-day average (CD 9cii)
Units 1,2,3,4: tpy limits from Operating Permit (7045.8, 7099.5, 10,944.4, 10736.9 tpy respectively)
Units 1,2,3,4: 0.15 lbs/mmBtu limit incorporated into Permit 0063M6R2 and tpy rates equivalent to the 0.15 lbs/mmBtu 30-day rolling average limit.

Note that the detailed method of compliance with the 0.15 lbs/mmBtu rolling average limit is specified in Footnote 5 to Table 2.1 in 0063M6R2 as follows:

"Compliance with the 0.15lb/mmBtu heat input daily-rolling, 30-day average SO2 emission limitation is determined by calculating at the end of each rolling 30 successive boiler operating days the arithmetic average of all hourly emission rates for SO2 except for data obtained during emergency conditions. Hourly emission rates will only be determined based on valid SO2 CEMS data for any hour where fuel is combusted in the unit. No missing hourly data substitution data will be used in determining compliance with the 0.15 lb/mmBtu heat input daily-rolling, 30-day average SO2 emission limit. "Boiler Operating Day" means a 24-hour period between 12 midnight and the following midnight (MST) during which any fuel is combusted at any time in the steam-generating unit."

For calculation involving lbs/mmBtu, the following maximum heat input values are used:

Unit 1: 3,707 mmBtu/hr
Unit 2: 3,688 mmBtu/hr
Unit 3: 5,758 mmBtu/hr
Unit 4: 5,649 mmBtu/hr

E 301 : Unit 1 Boiler Unit Specific Limits

NSPS based limits:

1.2 lbs/mmBtu * 3,707 mmBtu/hr = 4448.4 lbs/hr (3-hr avg) = 19,484 tpy

Consent Decree based limits:

0.25 lbs/mmBtu * 3,707 mmBtu/hr = 926.8 lbs/hr (7-day avg) = 4,059 tpy

3,707 mmBtu/hr / 9,148 Btu/lb coal * 0.0089 lbs S/lb coal * 2 lbs SO_2/lb S * (1-0.9) = 721.3 lbs/hr (annual avg) SO_2 emissions based on lowest heating value coal and maximum coal S content = 3,159 tpy annual average.

Permit 0063M6R2 Limit:

0.15 lbs/mmBtu (Daily Rolling 30 Day Average per Note 5 to Table 2.1 in 0063M6R2)

2435.0 tons per year (Daily rolling 365-day total)

E 302: Unit 2 Boiler Unit Specific Limits

20.2.31NMAC limits:

72 % Control (30-day avg)

3,688 mmBtu/hr/ 9,148 Btu/lb coal * 0.0089 lbs S/lb coal * 2 lbs SO_2/lb S * (1-0.72) = 2009.3 lbs/hr (30-day) SO_2 emissions based on lowest heating value coal and maximum coal S content = 8,800.7 tpy annual average. (8,051 tpy based on 9,990 Btu/lb average case coal)

Consent Decree based limits:

0.25 lbs/mmBtu * 3,688 mmBtu/hr = 922 lbs/hr (7-day avg) = 4,038.4 tpy

3,688 mmBtu/hr / 9,148 Btu/lb coal * 0.0089 lbs S/lb coal * 2 lbs SO_2/lb S * (1-0.9) = 717.6 lbs/hr (annual avg) SO_2 emissions based on lowest heating value coal and maximum coal S content = 3,143 tpy annual average.

Permit 0063M6R2 Limit:

0.15 lbs/mmBtu (Daily Rolling 30 Day Average per Note 5 to Table 2.1 in 0063M6R2)

2423.0 tons per year (Daily rolling 365-day total)

E 303: Unit 3 Boiler Unit Specific Limits

NSPS based limits:

1.2 lbs/mmBtu * 5,758 mmBtu/hr = 6,909.6 lbs/hr (3-hr avg) = 30,264 tpy

Consent Decree based limits:

0.25 lbs/mmBtu * 5,758 mmBtu/hr = 1439.5 lbs/hr (7-day avg) = 6,305 tpy

5,758 mmBtu/hr / 9,148 Btu/lb coal * 0.0089 lbs S/lb coal * 2 lbs SO_2/lb S * (1-0.9) = 1120.4 lbs/hr (annual avg) SO_2 emissions based on lowest heating value coal and maximum coal S content = 4,907.2 tpy annual average.

Permit 0063M6R2 Limit:

0.15 lbs/mmBtu (Daily Rolling 30 Day Average per Note 5 to Table 2.1 in 0063M6R2)

3783.0 tons per year (Daily rolling 365-day total)

E 304: Unit 4 Boiler Unit Specific Limits

NSPS based limits:

1.2 lbs/mmBtu * 5,649 mmBtu/hr = 6,778.8 lbs/hr (3-hr avg) = 29,691 tpy

Consent Decree based limits:

0.25 lbs/mmBtu * 5,649 mmBtu/hr = 1,412.3 lbs/hr (7-day avg) = 6,186 tpy

5,649 mmBtu/hr / 9,148 Btu/lb coal * 0.0089 lbs S/lb coal * 2 lbs SO_2/lb S * (1-0.9) = 1.099.2 lbs/hr (annual avg) SO_2 emissions based on lowest heating value coal and maximum coal S content = 4,814 tpy annual average.

Permit 0063M6R2 Limit:

0.15 lbs/mmBtu (Daily Rolling 30 Day Average per Note 5 to Table 2.1 in 0063M6R2)

3711.0 tons per year (Daily rolling 365-day total)

Plant-Wide Limits:

Units 1-4 Combined (Note: Although these applicable requirements may be interpreted as applying plant-wide, not just to boiler units, but because boiler units are by far the largest NOx and SO_2 sources, the plant-wide limit calculations given below are applied only to the boiler sources).

0.55 lb/mmBtu plant-wide annual average

Total mmBtu = 18,802 mmBtu/hr

0.55 * 18,802 = 10,341 lbs/hr (avg) = 45,294 tpy

0.46 lbs/mmBtu plant-wide annual average

Total mmBtu = 18,802 mmBtu/hr

0.46 * 18,802 = 8,649 lbs/hr (avg) = 37,882 tpy

13,000 lbs/hr plant-wide limit

13,000 lbs/hr is equivalent to 56,940 tpy

Reconciliation of Limits and Averaging Times for modeling purposes

Short-term (3hr and 24 hr avg) limits

On a unit by unit basis, the shortest term limits are

Unit 1: 4448.4 lbs/hr (3-hr avg)
Unit 2: 4425.6 lbs/hr (3-hr avg) if the 1.2 lbs/mmBtu is applied
Unit 3: 6,909.6 lbs/hr (3-hr avg)
Unit 4: 6,778.8 lbs/hr (3-hr avg)

Total short term is 22,562.4, but this exceeds the 13,000 lbs/hr short-term limit. Therefore for modeling purposes ONLY, not for regulatory limits, emissions have been assigned to the units, following the same procedure used in the Title V Operating Permit Renewal Application and dispersion modeling, as follows:

13,000/22,562.4 * the limit based on 1.2 lbs/mmBtu = a factor of 0.576

Unit 1: 2,562 lbs/hr
Unit 2: 2,549 lbs/hr
Unit 3: 3,980 lbs/hr
Unit 4: 3,905 lbs/hr

Total = 12,996 lbs/hr (which is under the 13,000 lbs/hr limit).

For dispersion modeling purposes, the maximum hourly SO2 emission rates allowed by the applicable regulations as outlined above have been reduced by approximately five (5) percent and rounded to the nearest 100 lbs/hr. With these reductions, the maximum hourly emission rates for the SJGS boiler units are:

Unit 1: 2,400 lbs/hr
Unit 2: 2,400 lbs/hr
Unit 3: 3,800 lbs/hr
Unit 4: 3,700 lbs/hr

These values will be used for the short-term SO_2 dispersion modeling analysis.

PM2.5-Total: (condensable plus filterable)

The Total PM 2.5 emissions (condensable plus filterable) are 0.034 lbs/mmBtu based on the NSR permit issued by the NMED on 12/14/2011. This limit applies to each individual boiler.

Unit 1: Total PM limit 0.034 lbs/mmBtu
Unit 2: Total PM limit 0.034 lbs/mmBtu
Unit 3: Total PM limit 0.034 lbs/mmBtu
Unit 4: Total PM limit 0.034 lbs/mmBtu

For dispersion modeling purposes, PTE mass emission rates have been calculated based on the maximum hourly heat input rate as follows:

Unit 1: 3,707 mmBtu/hr * 0.034 lbs/mmBtu = 126.0 lbs/hr PM2.5 =552.0 tpy

Unit 2: 3,688 mmBtu/hr * 0.034 lbs/mmBtu = 125.4 lbs/hr PM2.5 = 549.2 tpy

Unit 3: 5,758 mmBtu/hr * 0.034 lbs/mmBtu = 195.8 lbs/hr PM2.5 = 857.5 tpy

Unit 4: 5,649 mmBtu/hr * 0.034 lbs/mmBtu = 192.1 lbs/hr PM2.5 = 841.2 tpy

The ton per year values were calculated assuming 8760 hours per year of operation at full load.

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

- If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
- If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
- If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
- If an older version of AP-42 is used, include a complete copy of the section.
- If an EPA document or other material is referenced, include a complete copy.
- Fuel specifications sheet.
- If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

NA

Section 8

Map(s)

A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

NA

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)
(This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

☐ **I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"**
This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

NA

New Permit and **Significant Permit Revision** public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1. ☐A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
2. ☐A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
3. ☐A copy of the property tax record (20.2.72.203.B NMAC).
4. ☐A sample of the letters sent to the owners of record.
5. ☐A sample of the letters sent to counties, municipalities, and Indian tribes.
6. ☐A sample of the public notice posted and a verification of the local postings.
7. ☐A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
8. ☐A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
9. ☐A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
10. ☐A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
11. ☐A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.

NA

Section 10

Written Description of the Routine Operations of the Facility

A written description of the routine operations of the facility. Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

NA

Section 11
Source Determination
Source submitting under 20.2.70, 20.2.72, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

A. Identify the emission sources evaluated in this section (list and describe)**:**

- NA

B. Apply the 3 criteria for determining a single source:

SIC Code: Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, OR surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

☐ **Yes** ☐ **No**

Common Ownership or Control: Surrounding or associated sources are under common ownership or control as this source.

☐ **Yes** ☐ **No**

Contiguous or Adjacent: Surrounding or associated sources are contiguous or adjacent with this source.

☐ **Yes** ☐ **No**

C. Make a determination:

☐ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "**YES**" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "**NO**" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, and 20.2.74 NMAC applicability purposes.

☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Section 12

Section 12.A
PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

A PSD applicability determination for all sources. For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

- This facility is:

  - ☐ **a minor PSD source before and after this modification (if so, delete C and D below).**
  - ☐ **a major PSD source before this modification. This modification will make this a PSD minor source.**
  - ☐ **an existing PSD Major Source that has never had a major modification requiring a BACT analysis.**
  - ☐ **an existing PSD Major Source that has had a major modification requiring a BACT analysis**
  - ☐ **a new PSD Major Source after this modification.**

- **This facility [is or is not] one of the listed 20.2.74.501 Table I – PSD Source Categories. The "project" emissions** for this modification are **[significant or not significant]. [Discuss why.] The "project" emissions listed below [do or do not] only result from changes described in this permit application, thus no emissions from other [revisions or modifications, past or future] to this facility. Also, specifically discuss whether this project results in "de-bottlenecking", or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:**

  a. **NOx: XX.X TPY**
  b. **CO: XX.X TPY**
  c. **VOC: XX.X TPY**
  d. **SOx: XX.X TPY**
  e. **TSP (PM): XX.X TPY**
  f. **PM10: XX.X TPY**
  g. **PM2.5: XX.X TPY**
  h. **Fluorides: XX.X TPY**
  i. **Lead: XX.X TPY**
  j. **Sulfur compounds (listed in Table 2): XX.X TPY**
  k. **GHG: XX.X TPY**

- **Netting [is required, and analysis is attached to this document.] OR [is not required (project is not significant)] OR [Applicant is submitting a PSD Major Modification and chooses not to net.]**

- **BACT** is **[not required for this modification, as this application is a minor modification.] OR [required, as this application is a major modification. List pollutants subject to BACT review and provide a full top down BACT determination.]**

- If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

Section 13

Discussion Demonstrating Compliance With Each Applicable State & Federal Regulation

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Provide a discussion demonstrating compliance with applicable state & federal regulation. If there is a state or federal regulation (other than those listed here) for your facility's source category that does not apply to your facility, but seems on the surface that it should apply, add the regulation to the appropriate table below and provide the analysis. Examples of regulatory requirements that may or may not apply to your facility include 40 CFR 60 Subpart OOO (crushers), 40 CFR 63 Subpart HHH (HAPs), or 20.2.74 NMAC (PSD major sources). We don't want a discussion of every non-applicable regulation, but if there is questionable applicability, explain why it does not apply. All input cells should be filled in, even if the response is 'No' or 'N/A'.

In the "Justification" column, identify the criteria that are critical to the applicability determination, numbering each. For each unit listed in the "Applies to Unit No(s)" column, after each listed unit, include the number(s) of the criteria that made the regulation applicable. For example, TK-1 & TK-2 would be listed as: TK-1 (1, 3, 4), TK-2 (1, 2, 4). Doing so will provide the applicability criteria for each unit, while also minimizing the length of these tables.

As this table will become part of the SOB, please do not change the any formatting in the table, especially the width of the table.

If this application includes any proposed exemptions from otherwise applicable requirements, provide a narrative explanation of these proposed exemptions. These exemptions are from specific applicable requirements, which are spelled out in the requirements themselves, not exemptions from 20.2.70 NMAC or 20.2.72 NMAC.

Table for Applicable STATE REGULATIONS:

NA

Table for Applicable FEDERAL REGULATIONS :

NA

Section 14

Operational Plan to Mitigate Emissions

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☐ **Title V Sources** (20.2.70 NMAC)**:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☐ **NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☐ **Title V** (20.2.70 NMAC)**, NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

NA

Section 15

Alternative Operating Scenarios

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Alternative Operating Scenarios: Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

NA

Section 16

Air Dispersion Modeling

NSR (20.2.72 NMAC) and PSD (20.2.74 NMAC) Modeling: Provide an air quality **dispersion modeling** demonstration (if applicable) as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines. If air dispersion modeling has been waived for this permit application, attach the AQB Modeling Section modeling waiver documentation.

SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.nmenv.state.nm.us/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.

Title V (20.2.70 NMAC) Modeling: Title V applications must specify the NSR Permit number for which air quality dispersion modeling was last submitted. Additionally, Title V facilities reporting new SSM emissions require modeling or a modeling waiver to demonstrate compliance with standards.

NA

Section 17

Compliance Test History

(submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

To save paper and to standardize the application format, delete this sentence and the samples in the Compliance Test History Table, and begin your submittal for this attachment on this page.

NA

Section 18

Addendum for Streamline Applications

Do not print this section unless this is a streamline application.

Streamline Applications do not require a complete application. Submit Sections 1-A, 1-B, 1-D, 1-F, 1-G, 2-A, 2-C thru L, Sections 3 thru 8, Section 13, Section 18, Section 22, and Section 23 (Certification). Other sections may be required at the discretion of the Department. 20.2.72.202 NMAC Exemptions do not apply to Streamline sources. 20.2.72.219 NMAC revisions and modifications do not apply to Streamline sources, thus 20.2.72.219 type actions require a complete new application submittal. Please do not print sections of a streamline application that are not required.

18-A: Streamline Category	
1	**Indicate under which part of 20.2.72.301.D this facility is applying. Refer to the forth column of Table 18-D below, to assist in this determination:** ☐ 20.2.72.301.D(1) NMAC ☐ 20.2.72.301.D(2) NMAC ☐ 20.2.72.301.D(3) NMAC

18-B: Streamline Applicability Criteria		Answer (yes/no)
1	Does the source category for this facility meet one of those listed in the following table? (20.2.72.301.A NMAC) **20.2.72.501 Table 2 – Permit Streamlining Source Class Categories** 1. Reciprocating internal combustion engines including portable or temporary engines 2. Turbines	☐ Yes ☐ No
2	If this facility is a compressor station, does it meet the definition of a "Compressor station" below? (20.2.72.301.D NMAC) **"Compressor station"** means a facility whose primary function is the extraction of crude oil, natural gas, or water from the earth with compressors, or movement of any fluid, including crude oil or natural gas, or products refined from these substances through pipelines or the injection of natural gas or CO2 back into the earth using compressors. A compressor station may include engines to generate power in conjunction with the other functions of extraction, injection or transmission and may contain emergency flares. A compressor station may have auxiliary equipment which emits small quantities of regulated air contaminants, including but not limited to, separators, de-hydration units, heaters, treaters and storage tanks, provided the equipment is located within the same property boundaries as the compressor engine (underline added). (20.2.72.301.A NMAC)	☐ Yes ☐ No
3	Will the source operate in compliance with all applicable state and federal regulations, including federal new source performance standards incorporated by 20.2.77 NMAC and permit conditions? (20.2.72.305.B NMAC)	☐Yes ☐No
4	Will the fuel combusted at this facility be produced natural gas, sweet natural gas, liquid petroleum gas, or fuel gas containing 0.1 grain of total sulfur or less per dry standard cubic foot; or refinery grade diesel or No. 2 fuel oil that is not a blend containing waste oils or solvents and contains less than 0.3% by weight sulfur? (20.2.72.306 NMAC)	☐Yes ☐No

5	Will all spark ignited gas-fired or any compression ignited dual fuel-fired engine which operates with a non-selective catalytic converter be equipped and operated with an automatic air-fuel ratio (AFR) controller which maintains AFR in the range required to minimize NOx emissions, as recommended by the manufacturer? (20.2.72.306 NMAC)	☐Yes ☐No
6	Has payment of all fees that are specified in 20.2.75 NMAC (Construction Permit Fees), as payable at the time the application is submitted, been included with the application package? (20.2.72.302.15 NMAC)	☐Yes ☐No
7	Is the answer to each of the above questions, #1 through #6, '**Yes**'? If the answer to **this** question is "**No**", this facility does **not** qualify for a streamline permit.	☐Yes ☐No
8	Will the facility, either before or after construction or modification, have a total potential to emit of any regulated air contaminant[2] greater than 200 tons per year (tpy) of any one regulated air pollutant (CO, NOx, SO2, or VOC)? (20.2.72.301.B.2 NMAC); **"Potential to emit"** or **"potential emissions"** means the maximum capacity of a stationary source to emit a regulated air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitations or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.	☐ Yes ☐ No
9	Is the facility a "major stationary source" as defined in 20 NMAC 2.74? (20.2.72.301.B.1 NMAC)	☐ Yes ☐ No
10	Is this source subject 20.2.78 NMAC, other than 40CFR61 Subpart M National Emission Standard for Asbestos? (20.2.72.301.B.3 NMAC)	☐ Yes ☐ No
11	Is this a source of potential air toxic emissions (20 NMAC 2.72. 400-499)? (20.2.72.301.B.3 NMAC)	☐ Yes ☐ No
12	Will the reciprocating internal combustion (IC) engines and/or turbines be located at a petroleum refinery, chemical manufacturing plant, bulk gasoline terminal, natural gas processing plant, or at any facility containing sources in addition to IC engines and/or turbines for which an air quality permit is required through state or federal air quality regulations in the absence of the (IC) engines and/or turbines? (20.2.72.301.B.4 NMAC)	☐ Yes ☐ No
13	Will the proposed facility be located within any of the 20.2.72.301.B.5 exclusion areas specified in the Air Dispersion Modeling Guidelines[1], Table: Areas Where Streamline Permits Are Prohibited ? (20.2.72.301.B.5 NMAC) http://www.nmenv.state.nm.us/aqb/modeling	☐ Yes ☐ No
14	Will the proposed facility's impact area intersect any of the areas specified in the Air Dispersion Modeling Guidelines[1], Table: Areas Where Streamline Permits Are Prohibited ? (20.2.72.301.B.5 NMAC) http://www.nmenv.state.nm.us/aqb/modeling	☐Yes ☐No ☐N/A
15	Is the answer to each of the above questions, #8 through #14, '**No**'? If the answer to **this** question is "**No**", this facility does **not** qualify for a streamline permit.	☐Yes ☐No

[1] The Air Dispersion Modeling Guidelines contain a section on streamline permitting. The table mentioned above can be found within those guidelines at http://www.nmenv.state.nm.us/aqb/modeling

[2] The potential to emit for nitrogen dioxide shall be based on total oxides of nitrogen

18-C: Streamline Location Restrictions		Answer (yes/no)	Identify: Name and Distance (km)
1	Will the distance from the nearest property boundary to the nearest school, residence, office building or occupied structure, excluding the immediate facility complex be greater than one (1.0) km? (20.2.72.301.B.6.a NMAC)	☐Yes ☐No	
2	Will the distance from the nearest property boundary to the nearest state park, Class II wilderness or wildlife refuge, historic park, state recreation area be greater than three (3.0) km? (20.2.72.301.B.6.b NMAC) The Air Dispersion Modeling Guidelines[1], Table: List Of State Parks, Class II Wilderness Areas, Class II National Wildlife Refuge, National Historic Parks, State Recreation Areas, and Class I Areas contains a list of most of these areas in New Mexico, but may not include new areas designated since the modeling guidelines were published.	☐Yes ☐No	
3	Will the distance from the nearest property boundary to the nearest community with a population of more than 20,000 people be greater than three (3.0) km? (20.2.72.301.B.6 NMAC).b	☐Yes ☐No	
4	Will the distance from the nearest property boundary to the nearest community with a population of more than 40,000 people be greater than 10 km? (20.2.72.301.B.6.c NMAC)	☐Yes ☐No	
5	Will the distance from the nearest property boundary to the nearest Class I area be greater than 30 km? (20.2.72.301.B.6.d NMAC) The Air Dispersion Modeling Guidelines[1], Table: List Of State Parks, Class II Wilderness Areas, Class II National Wildlife Refuge, National Historic Parks, State Recreation Areas, and Class I Areas contains a list of most of these areas in New Mexico, but may not include new areas designated since the modeling guidelines were published.	☐Yes ☐No	
6	Will the distance from the nearest property boundary to Bernalillo County be greater than 15 km? (20.2.72.301.B.7 NMAC)	☐Yes ☐No	-NA-
7	Is the answer to all of the above question yes or N/A? If the answer to **this** question is "**No**", this facility does not qualify for a streamline permit.	☐Yes ☐No	-NA-

[1] The Air Dispersion Modeling Guidelines contain a section on streamline permitting. The table mentioned above can be found within those guidelines at http://www.nmenv.state.nm.us/aqb/modeling.

18-D: Source Category Determination			
1	Is the total potential to emit of each regulated contaminant from all sources at the facility less than 40 tpy?	☐ Yes ☐ No	• If the answers to this question is "Yes", the facility qualifies for a 20.2.72.301.D.1 NMAC streamline permit. • Public notice is not required, 20.2.72.303.A NMAC. • Modeling is **not** required, 20.2.72.301.D NMAC. • If "Yes", leave the remainder of this table blank.
2	Is the total potential to emit of each regulated contaminant from all emission sources at the facility less than 100 tons per year (tpy) **AND** the impact on ambient air from all sources at the facility less than the ambient significance levels in 20.2.72.500 NMAC?	☐ Yes ☐ No	• If the answer to this question is "Yes", the facility qualifies for a 20.2.72.301.D.2 NMAC streamline permit. • Public notice is not required, 20.2.72.303.A NMAC. • **Modeling is required** in accordance with 20.2.72.301.D.2 NMAC • If "Yes", leave the remainder of this table blank.

3.a	Is the total potential to emit of each regulated contaminant from all emission sources at the facility less than 200 tons per year (tpy) **AND** the maximum modeled ambient impact from the total potential emissions at the facility less than 50 percent of each applicable PSD increment, state and federal ambient air quality standards?	☐ Yes ☐ No	• If the answers to these questions (3.a, 3.b, 3.c, and 3.d) are all "Yes", the facility qualifies for a 20.2.72.301.D.3 NMAC streamline permit. • Public notice is required in accordance with NMAC 20.2.72.303 NMAC. • **Modeling is required** in accordance with 20.2.72.301.D.3 NMAC • If the answers to questions 1, 2, and any of questions in question 3 (3.a, 3.b, 3.c, or 3.d) are "No", this facility does not qualify for a streamline permit.
3.b	Are there no adjacent sources emitting the same regulated air contaminant(s) as the source within 2.5 km of the modeled nitrogen dioxide (NO2) impact area?	☐ Yes ☐ No	
3.c	Is the "sum of the potential emissions for oxides of nitrogen from all adjacent sources" (SUM) within 15 km of the NO2 impact area (SUM15) less than 740 tpy?	☐ Yes ☐ No	
3.d	Is the "sum of the potential emissions for oxides of nitrogen from all adjacent sources" (SUM) within 25 km of the NO2 impact area (SUM25) less than 1540 tpy?	☐ Yes ☐ No	

Note: All modeling demonstrations have the option of demonstrating compliance with 20.2.72.301.D.3 NMAC. All public notices are required to comply with the public notice requirements of a NMAC20.2.72.301.D.3 facility.

18-E: Submittals

1	If a facility is required to submit a modeling analysis to demonstrate compliance with NMAC 20.2.72.300-399, use the Department's most current version of the Departments Air Dispersion Modeling Guidelines, and include a copy of the modeling in the application. A copy of the most current version of the guidelines can be obtained at the following web address: http://www.nmenv.state.nm.us/aqb/modeling.
2	**Public Notice:** Per 20.2.72.303.A NMAC, public notice is only required for sources subject to NMAC 20.2.72.301.D.3. Public notice submittals shall consist of the following: 1. Proof of Public Notice 2. Include a copy of the certified letter receipts (Field office & Federal Land Managers) (20.2.72.206.A.7, 302.A & 302.12) 3. A copy of the letters sent to the appropriate federal land manager if the source will locate within 50 km of a boundary of a Class I area (302.A.2) 4. A statement stating a complete copy of the application and public notice has been provided to the Departments field or district office nearest the source (302.A.1) 5. The location where the public notice has been posted on the site (303.B.2) 6. A copy of the classified or legal ad and its affidavit of publication (303.B.1)

Section 19

Requirements for Title V Program

Do not print this section unless this is a Title V application.

Who Must Use this Attachment:

* Any major source as defined in 20.2.70 NMAC.
* Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 - Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
* Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See http://www.nmenv.state.nm.us/aqb/index.html. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
* Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.

19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

No changes to current CAM plan are required.

19.2 - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

SJGS is in compliance with current Title V requirements (see Compliance Certification submitted 01/27/2012).

19.3 - Continued Compliance (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

San Juan Generating Station will remain in compliance with all applicable requirements identified in this permit application, unless those requirements are revoked by Congress, the Administrator or the Department, or revised or reinterpreted by Congress, the Administrator or the Department so as to be no longer applicable to San Juan Generating Station. San Juan Generating Station will, in a timely manner, comply with all applicable requirements that may be created by new rules that become effective during the permit term. Compliance with any new requirements will be achieved within the schedule expressly required by the applicable requirement. If required, the 20.2.70NMAC permit will be updated , modified or supplemented according to the procedures of 20.2.70NMAC or according to specific procedures included in the new applicable requirement.

19.4 - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

SJGS proposes to continue the current schedule for submitting annual compliance certification s for the January 1 through December 31 period of each year by January 30 of the following year.

19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

---

1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? **X Yes** **☐ No**

2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? **X Yes** **☐ No**

   (If the answer is yes, describe the type of equipment and how many units are at the facility.)

3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? **X Yes** **☐ No**

4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.) NA

19.6 - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

A. **Description of Compliance Status:** (20.2.70.300.D.11.a NMAC)
A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

B. **Compliance plan:** (20.2.70.300.D.11.B NMAC)
A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

C. **Compliance schedule:** (20.2.70.300D.11.c NMAC)
A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

D. **Schedule of Certified Progress Reports:** (20.2.70.300.D.11.d NMAC)
A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)
If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

NOTE: The Acid Rain program has additional forms. See http://www.nmenv.state.nm.us/aqb/index.html. Sources that are subject to both the Title V and Acid Rain regulations are **encouraged** to submit both applications **simultaneously**.

Not applicable. SJGS is in compliance with applicable requirements.

19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

SJGS is not subject to 112(r).

19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos

Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B NMAC)? Yes

(If the answer is yes, state which apply and provide the distances.)

Colorado 21.90 km, Arizona 54.4 km, Navajo Reservation 3.7 km, Southern Ute Reservation 30.6 km, Ute Mtn. Ute Reservation 4.7 km

19.9 - Responsible Official

Mr. Gregory Smith
Plant Manager
P.O. Box 227, Waterflow, NM 87471
Gregory.Smith@pnm.com
505 598 7652

Section 20

Other Relevant Information

Other relevant information. Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

NA

Section 21

Addendum for Landfill Applications

Do not print this section unless this is a landfill application.

Landfill Applications are not required to complete Sections 1-C and 1-E. All other Sections are required.

21-A: Landfill Information

1	How long will the landfill be operated?			
2	Maximum operational hours per year:			
3	Landfill Operating hours (open to the public) M-F:		Sat.	Sun.
4	Landfill Design Capacity (Tons):		Megagrams:	Cubic meters:
5	Landfill NMOC Emission Rate	☐ Less than 50mg/year	☐ Greater than 50mg/year	
6	Annual Waste Acceptance Rate:			
7	Is Petroleum Contaminated Soil Accepted?		If so, what is the annual acceptance rate?	
8	NM Solid Waste Permit No.:		SW Permit Date:	
9	Describe NM Solid Waste Permit, Status, and Type of waste deposited at landfill			
10	Describe briefly any process(es) or any other operations conducted at the landfill			

21-B: NMOC Emissions

1	NMOC Emissions based on LandGEM:
2	Tier 1:
3	Tier 2:
4	Tier 3:

EMISSIONS (refer to 40 CFR 60.754 for test methods and procedures or AP-42 Sect.2.4)
Include the latest LandGEM calculations and/or testing results.
Facilities that have a Landfill GCCS complete the following section.

21-C: Landfill Gas Collection and Control System (GCCS) Design Plan		Yes	No
1	Was the GCCS design certified by a P.E?		
2	Was the Design System Plan submitted within 12 months of the first report of the site exceeding 50Mg/yr?		
3	Is the GCCS planned to be operational within 30 months of the first report of the site exceeding 50 Mg/yr?		
4	Does the GCCS comply with the 2 year/5 year rule?		
5	Is the design life of the GCCS more than 15 years?		
6	Have measures been taken in the GCCS Plan to control lateral gas migration?		
7	If the GCCS design is for a passive system (non enhanced), are the necessary liners in place?		
8	Is adequate density of collectors planned?		
9	Is the Landfill gas conveyance system sized properly?		
10	Is the landfill gas planned to be routed to a control device? (Utility flare, enclosed flare or other)		
11	If the control device is a flare, does it include continuous temperature monitoring and a flow measurement device?		
12	Is the flare sized properly?		
13	Does the GCCS include fittings to allow connection of additional collectors if necessary in the future?		
14	Does the wellhead for all collectors include at least one sample port and one thermometer port?		
15	Operational Issues: 1. Will the GCCS be operated at a vacume at every well? 2. Will the GCCS be operated at the appropriate gas temps? 3. Will the GCCS be operated with minimal amounts of air? 4. Will monitoring be done monthly to conform with these operational issues? 5. Will surface emissions monitoring be completed? 6. Will the blower automatically be shut down if the control device is inoperable?		
16	Was the design diagram for the GCCS, including the flare, blower, and well location attached to the permit application?		

Section 22

Green House Gas Applicability

(submitting under 20.2.70, 20.2.72, 20.2.73, 20.2.74 NMAC)

Title V (20.2.70 NMAC), NSR (20.2.72 NMAC), NOI (20.2.73 NMAC) and PSD (20.2.74 NMAC) applicants must determine if they are subject to Title V permitting and/or PSD permitting for green house gas (GHG) emissions. GHG emissions are the sum of the aggregate group of six green house gases that include carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). There are two thresholds that must be computed to determine applicability. The first threshold is the sum of GHG mass emissions in TPY. GHG mass emissions are the sum of the total annual tons of green house gases without adjusting with the GWPs. The second threshold is the sum of CO_2 equivalent (CO_2e) emissions in TPY GHG. CO_2e emissions are the sum of the mass emissions of each individual GHG multiplied by its global warming potential (GWP) found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.

Green House Gas TV and PSD Applicability Determination:

☐ **Notice of Intent Sources** (20.2.73 NMAC): By checking this box and certifying this application the applicant certifies that the facility, based upon the quantity of stack emissions, including start up, shut down, and maintenance emissions, is not subject to 20.2.70 NMAC or 20.2.74 NMAC for Green House Gas (GHG) Emissions. The Department may request the emissions calculations and other documents supporting this determination.

Minor NSR (20.2.72 NMAC), PSD Major (20.2.74 NMAC), and Title V (20.2.70 NMAC) sources must complete the steps outlined below to determine GHG TV and/or PSD applicability.

1. Calculate existing mass GHG and CO_2e emissions from your source. For PSD purposes, if this is a modification to an existing source, you must also calculate the increase in mass GHG and CO_2e emissions due to the modification. Start up, shut down, and maintenance emissions must be included.
2. See Tables 1 and 2 below and compare your mass GHG and CO_2e emissions to the appropriate category for your source.
3. If your source meets all of the criteria within a category, then you must obtain a PSD permit and/or a Title V permit for green house gas emissions.
4. If this is a GHG Major source with an existing BACT or if this is a permit application for a PSD or Title V permit with GHG above the thresholds in Tables 1 or 2, include the emissions calculations and supporting documents in the appropriate sections of this application unless instructed otherwise in Tables 1 or 2. Report GHG mass and CO_2e emissions in Table 2-P of this application unless instructed otherwise in Tables 1 or 2. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).

NSR (20.2.72 NMAC), PSD Major (20.2.74 NMAC), and Title V (20.2.70 NMAC): Based upon the GHG applicability criteria in this section the applicant certifies that the source is (check all that apply):

☐ Title V Minor and PSD Minor for GHG Emissions [The Department may request the emissions calculations and other documents supporting this determination.]

☐ Title V Major for GHG Emissions

☐ PSD Major for GHG Emissions

Table 1 - Title V Applicability Criteria		
On or after July 1, 2011, newly constructed source, or existing source that does not have a Title V permit	**On or after July 1, 2011, modification or Renewal to Existing Title V Source**	**Requirement**
Source emits or has potential to emit (PTE) ≥ 100,000 TPY CO_2e **and**	Source emits or has PTE of ≥100,000 TPY CO_2e **and** 100 TPY GHG mass basis	**For new sources:** For a source that meets the criteria on July 1, 2011, submit a Title V permit application no

Table 1 - Title V Applicability Criteria		
100 TPY GHG mass basis		later than June 30, 2012. For a source that meets the criteria after July 1, 2011, submit a Title V application within 12 months of becoming subject to the GHG operating permit program (12 months from commencement of operation of the new unit or modification that caused the source to be subject to Title V). **For existing sources:** Include GHG with the next Title V application for a renewal or modification. **For both new and existing sources:** Include in the TV application, GHG emissions calculations and supporting documents, report CO_2e and GHG emissions in Table 2-P, and address any applicable CAA requirements (e.g. PSD BACT, NSPS). If there are no applicable requirements and if GHG emissions have been reported to the Department under 20.2.73 NMAC, the requirements of the previous sentence do not apply, but changes in GHG emissions resulting in GHG emission limits must be calculated and reported in Table 2-P for Title V permit modifications. Typically GHG emission limits would be established only when there is an applicable requirement, such as a PSD GHG BACT or limits taken to be GHG synthetic minor.

Table 2 - PSD Applicability Criteria			
On or After July 1, 2011, New Source	**On or After July 1, 2011, Major Modification to Existing PSD Major Source**	**On or After July 1, 2011, Modification to Existing PSD Minor Source**	**Requirement**
Source is subject to PSD for another pollutant **and** GHG PTE is ≥ than 75,000 tpy CO_2e **or** GHG PTE is ≥ 100,000 TPY CO_2e **and** ≥ 100/250 TPY mass basis	Source is subject to PSD for another regulated pollutant **and** net GHG emissions increase is ≥ 75,000 tpy CO_2e and greater than zero TPY mass basis **or** existing source has GHG PTE ≥ 100,000 TPY CO_2e **and** ≥ 100/250 TPY mass basis **and** net emissions GHG increase is ≥ 75,000 TPY CO_2e and greater than zero	Actual or potential emissions of GHGs from the modification is ≥ 100,000 TPY CO_2e **and** ≥ 100/250 TPY mass basis. Minor PSD sources cannot net out of PSD review.	The source is subject to PSD permitting for GHG emissions and other regulated pollutants that are significant. In the application include GHG emissions calculations and supporting documents, report CO_2e and GHG emissions in Table 2-P, complete a GHG BACT determination, and include the TPY CO_2e and GHG mass emissions in the public notice. **Note:** If a minor source permit is issued after January 2, 2011, but before July 1, 2011, and construction has not commenced by July 1, 2011, the permit must be cancelled, reopened, or an additional PSD permitting action taken, if the approved change/construction

Table 2 - PSD Applicability Criteria			
	TPY mass basis		would trigger GHG PSD after July 1, 2011.

Additional Information:

Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Internet emission factor database WebFIRE at http://cfpub.epa.gov/webfire/
- Subparts C through UU of 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD and TV applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/ghgresources.html:
  - ENERGY STAR Industrial Sector Energy Guides and Plant Energy Performance Indicators (benchmarks) http://www.energystar.gov;
  - US EPA National Greenhouse Gas Inventory, http://epa.gov/climatechange/emissions/usinventoryreport.html;
  - EPA's Climate Leaders, http://www.epa.gov/climateleaders/index.html
  - EPA Voluntary Partnerships of GHG Reductions that include the landfill methane outreach program, the CHP partnership program, the Green Power Partnership, the Coalbed Methane Outreach program, the Natural Gas STAR program, and the Voluntary Aluminum Industrial Partnership.
  - SF Emission Reduction Partnership for the Magensium Industry http://www.epa.gov/highgwp/magnesium-sf6/index.html
  - PFC Reduction/Climate Partnership for the Semiconductor Industry http://www.epa.gov/highgwp/semiconductor-pfc/index.html

Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. Please note that sources not subject to 40 CFR 98 and/or 20.2.300 NMAC may still be subject to the GHG PSD and/or TV permitting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO_2 over a specified time period.

"Greenhouse gas" for the purpose of this part is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7.O NMAC, 20.2.74.7.Y NMAC).** You may also find GHGs defined in 40 CFR 86.1818-12(a).

Short Tons:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.
1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

EPA's GHG Tailoring Rule:

To review EPA's final GHG Tailoring rule and pre-amble, See "Final GHG Tailoring Rule dated May 13, 2010 located on EPA's NSR Regulations Webpage or Federal Register June 3, 2010 Volume 75, No. 106
http://www.epa.gov/nsr/actions.html

EPA Permitting Guidance:

EPA's Permitting Guidance for GHG and other GHG information can be found on EPA's NSR Clear Air Act Permitting for Greenhouse Gases webpage.
http://www.epa.gov/nsr/ghgpermitting.html

Section 23: Certification

Company Name: Public Service Company of New Mexico

I, _Gregory Smith_____, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this ____ day of May , 2012 , upon my oath or affirmation, before a notary of the State of

_____.

_____ _____
*Signature Date

_____ _____
Printed Name Title

Scribed and sworn before me on this ____ day of _____, _____.

My authorization as a notary of the State of New Mexico expires on the

_____ day of _____, _____.

_____ _____
Notary's Signature Date

_____
Notary's Printed Name

*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AD NMAC.